

Title (en)  
PROCESS FOR THE PREPARATION OF N- AND O-SUBSTITUTED MONO- OR BIS-URETHANES

Publication  
**EP 0048368 B1 19840613 (DE)**

Application  
**EP 81106989 A 19810905**

Priority  
DE 3035146 A 19800918

Abstract (en)  
[origin: EP0048368A2] 1. A process for the production of N- and O-substituted mono- or bis-urethanes, characterized in that urethanes corresponding to the following formula  $R^{**1}-(NH-CO-O-R^{**2})_n$  in which  $R^{**1}$  represents an n-functional, aliphatic C1 -C6 -hydrocarbon radical optionally containing ether bridges or an n-functional cycloaliphatic C6 -C13 -hydrocarbon radical,  $R^{**2}$  represents a hydroxyalkyl group containing from 2 to 3 carbon atoms, 2 carbon atoms being present between the oxygen atom of the hydroxyl group and the oxygen atom of the urethane group, and  $n = 1$  or  $2$ , are subjected to a transesterification reaction with alcohols containing only primary hydroxyl groups and corresponding to the following formula  $R^{**3}-(OH)_m$  in which  $R^{**3}$  represents a monofunctional ( $m = 1$ ), linear or branched, saturated aliphatic C8 -C18 -hydrocarbon radical optionally containing ether bridges, a monofunctional ( $m = 1$ ) araliphatic C8 -C15 -hydrocarbon radical or a difunctional ( $m = 2$ ), linear or branched, saturated aliphatic C3 -C18 -hydrocarbon radical optionally containing ether bridges in which at least 3 carbon atoms are present between the two hydroxyl groups, and  $m = 1$  or  $2$  with the proviso that  $m$  and  $n$  cannot both have the value  $2$ , in the presence of catalysts selected from the group comprising (i) oxides, hydroxides, salts of organic acids, salts of weak organic acids and organic complex compounds of monovalent thallium, and (ii) organic acid salts of 2- and 4-valent tin and organic compounds of 4-valent tin containing organic radicals which are not bound like salts, with elimination of alcohols corresponding to the following formula  $R^{**2}-OH$ .

IPC 1-7  
**C07C 125/065**; **C07C 125/073**; **C07C 118/00**

IPC 8 full level  
**C07C 67/00** (2006.01); **C07C 239/00** (2006.01); **C07C 241/00** (2006.01); **C07C 263/04** (2006.01); **C07C 265/00** (2006.01); **C07C 269/02** (2006.01); **C07C 271/06** (2006.01)

IPC 8 main group level  
**C07C** (2006.01)

CPC (source: EP)  
**C07C 263/04** (2013.01); **C07C 269/04** (2013.01); **C07C 2601/14** (2017.04)

Cited by  
EP0344565A1; EP0555628A3; US5001210A; EP0369590A3

Designated contracting state (EPC)  
BE CH DE FR GB IT LI NL

DOCDB simple family (publication)  
**EP 0048368 A2 19820331**; **EP 0048368 A3 19820512**; **EP 0048368 B1 19840613**; AU 7523681 A 19820325; BR 8105942 A 19820608; CA 1166650 A 19840501; DE 3035146 A1 19820422; DE 3164185 D1 19840719; ES 505559 A0 19820816; ES 8206451 A1 19820816; JP S5782360 A 19820522; ZA 816453 B 19820929

DOCDB simple family (application)  
**EP 81106989 A 19810905**; AU 7523681 A 19810915; BR 8105942 A 19810917; CA 385292 A 19810904; DE 3035146 A 19800918; DE 3164185 T 19810905; ES 505559 A 19810917; JP 14484581 A 19810916; ZA 816453 A 19810917